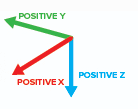
1. The 3-axis motion sensor was installed inside elevator to log data when the elevator moves vertically



1. The sensor data has 4 columns in following order : Timestamp, Acceleration X-axis, Acceleration Y-axis, Acceleration Z-axis
2. The sensor logs gravitational acceleration
   1. Sampling frequency: 25 Hertz which is 24 data points per second
   2. Sensitivity: 2g.
   3. The unit of data is in g.
3. Time range sensor was inside elevator and can be used for analysis: 2018-07-09 12:00:00 2018-08-09 12:00:00. Do not use the data outside of this range
4. Instruction about which axis to look for elevator vertical movements

|  |  |  |
| --- | --- | --- |
| **Name** | **Axis catches ED vertical movement** | **Direction**  Positive(P): Sensor was placing and moving towards positive axis.  The bigger the value, the larger the acceleration  Negative(N): Sensor was placing and moving negative axis. The smaller the value, the large the acceleration. |
| EDS\_1.csv | Z | P |
| EDS\_2.csv | Z | P |
| EDS\_3.csv | X | P |
| EDS\_4.csv | Z | N |
| EDS\_5.csv | X | P |
| EDS\_6.csv | Z | N |
| EDS\_7.csv | Z | P |
| EDS\_8.csv | X | N |
| EDS\_9.csv | Z | N |
| EDS\_10.csv | Z | N |
| EDS\_11.csv | X | P |
| EDS\_12.csv | X | P |
| EDS\_13.csv | Y | N |
| EDS\_14.csv | Z | N |
| EDS\_15.csv | Z | P |

**Tips:**

1. When the sensor is not moving, the default value shall be 1g when sensor is placing positive. Sensor data always has noises, calibration will be needed to make all sensors have the consistent data
2. Sample normal elevator movement plots are as follows. The more different the shape, the higher chance an anomaly happens.

